



Midewin National Tallgrass Prairie Volunteer Position Description

Title: Midewin Water Quality Monitor

Purpose: Water quality monitors collect high quality scientific data that will be used to gauge long-term trends in stream health, develop land management strategies, identify potentially degraded waters and assess the effectiveness of restoration projects. Water quality monitors help directly with part one of Midewin's mission to conserve, restore, and enhance the native populations and habitats of fish, wildlife, and plants.

Duties and Responsibilities: Monitors are responsible for their own transportation. On certain occasions, monitors ride in a Forest Service vehicle, with a government licensed monitor, in order to transport equipment to various sites. Water quality monitors collect water quality data such as stream velocity measurements, water height measurements, measuring in-stream water quality parameters including temperature, pH, dissolved oxygen and turbidity. Additional parameters may include conductivity, nitrate and phosphorus. This program requires a team of three to perform these activities, so monitors may choose their own trained partners or join an existing team. Teams must coordinate with Midewin's hydrologist to make sure all designated stream sites are monitored every two weeks. Data sheets, materials and hours of service must be submitted to the volunteer coordinator at the end of monitoring season.

Department and Location: Under the direction of Midewin's Hydrologist, volunteer time and data is contributed to Midewin's Restoration Team. Designated stream sites may be located along the Grant, Prairie, Jackson or Jordan Creek within Midewin's property of 19,000 acres.

Qualifications: Previous experience is not necessary. Monitors should be interested in learning about stream ecosystems and water quality indicators. Water quality monitors must be comfortable navigating through water on stream beds and banks. Monitors must be able to do field work, which includes carrying equipment and hiking distances up to a mile to access various monitoring sites, wading in ankle to knee-deep stream water, and standing for an extended period of time. Midewin will provide hip waders and water boots, but monitors typically prefer their own.

Time Commitment: Monitors gain more experience every year and therefore data gets more thorough and accurate, so a multiple year commitment is preferred. This type of long term monitoring is desired every two weeks, so water quality teams typically alternate in order to monitor once a month each (April-October). Monitoring days alternate for a weekday and a Saturday option. Water quality teams seem to spend between 2-3 hours monitoring each day. Monitors will fulfill their commitment by monitoring at least 2 days per year.

Training: All monitors should attend the spring training/refreshers workshop at Midewin, typically in March. This will cover safety, protocols, available training materials and equipment. The best training happens in the field and over time. New monitors are certainly welcome. Additional responsibilities could become applicable or available to this position in the future that might require additional training and/or certification. These additional responsibilities will be determined by the program managers and offered to selected volunteers.

Working Conditions/Physical Effort: *Monitors are covered by the Volunteer Agreement (Form 301a) while performing duties described by this position description during the season(s) listed or scheduled shifts.* Monitors must read, sign and consent to the U.S. Forest Service Job Hazard Analysis, which includes emergency plans, safety requirements and recommended best practices.

Monitors may work in variable conditions including:

- Exposure to outdoor weather conditions & allergens
- Walking on uneven terrain and/or through tall vegetation
- Hiking distances up to a mile to access the site and wading in ankle to knee-deep stream water
- Standing for an extended period of time
- May be working near hazardous plants or insects
- Light to moderate lifting

Benefits: Volunteer monitors further the citizen scientist movement by contributing valuable stream data for wetland restoration. Monitors can observe long-term progress towards the ecological restoration of Midewin. Midewin's volunteer staff receives ongoing recognition from their supervisor and other staff. Volunteers that contribute three or more individual volunteer visits in the fiscal year will receive an invitation to an annual volunteer recognition banquet in November. Midewin's volunteer staff receives the bimonthly Prairie Telegraph. Volunteers may be featured in the telegraph, newspaper articles and/or US Forest Service success stories. Awards can be received for outstanding, innovative and/or long term, core volunteers.

Related Opportunities: RiverWatch Monitors are assigned a designated stream site (200-foot stretch) on Midewin and will survey the site once a year (May 1-June 30). Sampling involves conducting a stream habitat survey and collecting and preserving (in alcohol) aquatic organisms that reside in the stream. Monitors are responsible for identification of the stream organisms using Midewin's lab.